

Appl. No. 09/703,140
Amdt. dated November 7, 2005
Response to Final Office Action of September 9, 2005

REMARKS/ARGUMENTS

In view of the foregoing amendments and the following remarks, reconsideration of this application is requested. Claims 2-6 and 9-19 are now pending with claims 6, 9, 12, and 17 being independent. Claims 2, 6, and 9 have been amended.

Applicant thanks the Examiner for indicating that claim 6 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant has amended claim 6 to incorporate the elements of claim 1 into claim 6 and put claim 6 into independent form, thus making claim 6 allowable.

Applicant has added the limitation of former claim 6 that was indicated as allowable by the Examiner into independent claim 9, thus making claim 9 allowable.

Applicant has added new claims 12-19. Claims 12-16 are similar in scope to claims 2-6. Claim 12 includes the limitation of former claim 6 that was indicated as allowable by the Examiner, thus making claim 12 allowable. Claim 12 does not include the limitation of "combining comprises shifting the most significant product left by a width of the least significant element of the second pair of elements prior to adding the most significant product to the least significant product" that is recited in amended claim 6 that the Examiner in the Office Action had indicated was taught by the prior art.

Newly added claims 17-19 are similar in scope to claims 9-11. Claim 17 includes the limitation of former claim 6 that was indicated as allowable by the Examiner, thus making claim 17 allowable. Claim 17 does not include the limitation "wherein the arithmetic circuit shifts the most significant product by a number of bits prior to adding the most significant product to the least significant product" recited in amended claim 9 that the Examiner in the Office Action had indicated was taught by the prior art.

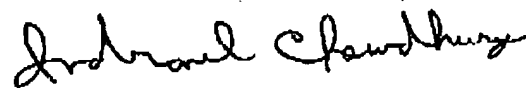
Claims 2-5, 10-11, 13-16, and 18-19 each depend from one of independent claims 6, 9, 12, and 17, respectively, discussed above. Accordingly, dependent claims 2-5, 10-11, 13-16, and 18-19 are allowable for the reasons set forth with respect to their respective independent claims, and for containing allowable subject matter in their own right. Independent consideration and allowance of the dependent claims are requested.

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If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at phone number (281) 207-5327.

In view of these remarks and amendments, Applicant submits that this application is now in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account 20-0668 of Texas Instruments Incorporated.

Respectfully submitted,



Indranil Chowdhury
Attorney for Applicant
Reg. No. 47,490

Robert D. Marshall, Jr.
Texas Instruments Incorporated
P.O. Box 655474, MS 3999
Dallas, TX 75265
(972) 917-5290